



# **AMERICAN CONSUMERS' ATTITUDES TOWARD RECYCLING: FRAMING THE RECYCLING MESSAGE**

**FOCUS GROUP PANEL REPORT**

**Conducted for Keep America Beautiful®  
by Responsive Management™**

**2019**



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## EXECUTIVE SUMMARY

### INTRODUCTION AND METHODOLOGY

This study was conducted for Keep America Beautiful to examine American consumers' attitudes toward recycling. The qualitative findings discussed herein encompass a town hall focus group panel discussion conducted in Washington, D.C.

The panel discussion was conducted on November 15, 2018 and lasted approximately 90 minutes. The panel was made up of seven general population consumers with various levels of recycling participation (designated as non-recyclers, “wishful” recyclers, and “die hard” recyclers) and a group of recycling industry professionals and brand representatives whose companies either currently use recycled materials in the production of their products or who work on initiatives that include the use of recycled materials.

Responsive Management developed a recruiting screener questionnaire that defined the criteria for participation and recruited the consumer participants for the discussion. Industry professionals and brand representatives were identified and invited by Keep America Beautiful. The focus group was viewed by an onsite audience and streamed on Facebook Live in order to open the conversation to the public for feedback and questions. Consumer participants were provided a monetary incentive to encourage participation. The panel was conducted using a discussion guide (the guide is included in the report appendix).

### MAJOR FINDINGS

- **Recyclers at all levels of participation agree that more communication and education would likely encourage more widespread recycling.**

Throughout the focus group, most participants with lower levels of participation reiterated that they would be more likely to recycle if they had access to regular communication and education that would help answer questions regarding how to recycle, where to recycle, and what was recyclable. Participants agreed that letters, emails, and an easily accessible website with specific directions and education materials would result in greater levels of participation.

- **Consumers want recycling to be easy.**

Repeatedly, non-recycling and “wishful” recycling participants asserted that one of their primary reasons for not recycling more was that the process was too complicated. Specifically, these participants felt that the rules for recycling often changed from one municipality to another, leading to frustration. It was also mentioned that at least some of the items they wanted to recycle would ultimately find their way to landfills as a result of complex and constantly-changing rules and regulations. Further, participants requested that recycling bins should be easier to obtain, and more bins should be distributed to businesses and municipalities in order to promote widespread recycling.

- **Consumers want to understand the process of recycling.**

The consumers in the focus group expressed a clear desire to understand the process of recycling, as well as the overall goals of recycling. Several participants felt that a better understanding of the process and results of recycling might encourage more participation.

- **Consumers are very interested in single-stream recycling.**

Participants felt that creating easier systems for recycling would have a positive impact on recycling participation. Several consumers who had experience with single-stream recycling (a method through which all items are mixed together instead of being separated into different receptacles) agreed that, because of its ease, single-stream recycling had increased their participation in recycling. Participants who were not familiar with single-stream recycling expressed interest in the process, and upon explanation, indicated that they would be more likely to recycle if single-stream recycling were available in their area.

- **Consumers want to benefit from their recycling efforts.**

Some participants felt that the apparent lack of tangible benefits for those who participate in recycling had led to a reduction in their recycling. There was concern that the recycling industry is not doing enough to show consumers the direct result of their recycling efforts. Further, a few participants felt that consumers should be rewarded or receive benefits as a result of recycling participation. Although no specific suggestions for rewards or benefits were offered during the focus group, conversation indicated that some consumers feel that they should be compensated in some way for the time and energy that recycling requires.

- **Climate change and the environment seem only to encourage recycling among those who already recycle.**

Among “die hard” recyclers, climate change and environmental issues were considered major influences on their decision to recycle. Consumers who do not recycle or who recycle very little, however, indicated that the state of the environment and issues associated with climate change have limited impact on their likelihood of recycling.

- **Social pressure has some influence on individual recycling participation.**

Some participants with lower levels of recycling participation indicated that their friends’ and family members’ recycling behavior had some effect on their own behavior, particularly when those friends and family members encouraged recycling and spoke frequently of its importance. Some participants indicated that they recycled more often when they were around others who recycled.

- **Consumers desire communications tailored to specific age segments.**

Some consumers expressed concern that the recycling industry is spending too much time targeting younger generations, and as a result, older generations are not as aware of the impact recycling has on the environment and the economy. Participants agreed that more effort should be taken to create age-appropriate advertising to encourage recycling.

- **Consumers want to know how to recycle *everything*, not just the basics (e.g., glass, plastic, paper, and aluminum).**

Some consumer participants suggested that the recycling industry is missing some opportunities for recycling by not educating the public about what to do with larger items such as furniture and computers. It was acknowledged that many such items require special handling in their disposal, and a number of consumers seemed eager to understand how they could recycle these items.

- **The industry must do a better job communicating the importance of recycling.**

A number of industry professionals and brand representatives in the group suggested that many consumers simply do not realize how important recycling is. It was recommended that the industry urge consumers to start with the basics by consistently recycling plastic, glass, paper, cardboard, tin, and aluminum. It was mentioned that, because most consumers know these items are recyclable, a big difference can be made in the amount of refuse going to landfills if more consumers can be motivated to consistently recycle these basic items.

- **Marketing for recycling should focus on the positive outcomes of the process.**

Brand representatives felt strongly that there was not enough marketing for recycling. Several participants felt that a marketing campaign focusing on the positive impacts of recycling could lead to increased recycling among consumers.

- **Marketing about recycling should be more approachable and personal.**

Participants suggested that future marketing for recycling should avoid campaigns that refer to numbers that seem unattainable or borderline inconceivable. Participants believed that smaller, more “manageable” numbers, such as numbers that characterize the difference one individual can make by recycling, are far more likely to influence recycling participation.

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## **INTRODUCTION AND METHODOLOGY**

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The panel discussion was conducted on November 15, 2018 and lasted approximately 90 minutes. The panel was made up of seven general population consumers with various levels of recycling participation (designated as non-recyclers, “wishful” recyclers, and “die hard” recyclers) and a group of recycling industry professionals and brand representatives whose companies either currently use recycled materials in the production of their products or who work on initiatives that include the use of recycled materials.

Responsive Management developed a recruiting screener questionnaire that defined the criteria for participation and recruited the consumer participants for the discussion. Industry professionals and brand representatives were identified and invited by Keep America Beautiful. The focus group was viewed by an onsite audience and was streamed on Facebook Live in order to open the conversation to the public for feedback and questions. Consumer participants were provided a monetary incentive to encourage participation. The panel was conducted using a discussion guide (the guide is included in the report appendix).

### **FOCUS GROUP OVERVIEW**

The use of focus groups is an accepted research technique for the qualitative exploration of attitudes, opinions, perceptions, motivations, constraints, and behaviors. Focus groups allow for extensive open-ended responses to questions; probing and follow-up questions; group discussion; and observation of emotional responses to topics—aspects that cannot be measured in a quantitative survey. Qualitative research sacrifices reliability for increased validity. This means that, although these focus group findings could not have been replicated statistically as a survey could have been (high reliability), they provided a more nuanced understanding of the issues associated with recycling participation and attitudes toward recycling (high validity).

The focus group was conducted using a discussion guide that addressed key motivators and obstacles related to recycling. The discussion guide also allowed opportunities for brand representatives and industry professionals to respond to consumers' comments and offer additional information on recycling. The focus group was moderated by two of Responsive Management's trained moderators. The moderators, through the use of the discussion guide, kept the discussion within design parameters without exerting a strong influence on the discussion content. In this sense, the focus group was a non-directive group discussion that exposed the spontaneous attitudes, insights, and perceptions of general population consumers.

The focus group discussion was recorded for transcription and analysis.

### **FOCUS GROUP COORDINATION**

The focus group was conducted in Washington, D.C. Responsive Management coordinated with the host facility to ensure that the focus group room was set up appropriately for maximum

interaction and group participation. In addition, Responsive Management and Keep America Beautiful ensured that video and audio recording equipment was properly set up and working.

### **FOCUS GROUP PARTICIPANT RECRUITING**

General population consumer participants were recruited by Responsive Management. Responsive Management staff coordinated with a local recruiting facility to randomly contact area residents; these residents were given a brief summary of the focus group topic and asked a series of questions from a screener questionnaire to their eligibility for the group. The screener included questions to assess recycling participation as well as key demographic characteristics such as age, gender, and background. If qualified and interested, residents were invited to participate in the group. All industry professionals and brand representatives were identified and invited by Keep America Beautiful.

To participate in the focus group, the residents had to be at least 18 years old and not employed by a business or agency working in the fields of marketing, advertising, or recycling. An effort was made to recruit participants reflective of a range of ages and a roughly equal mix of genders.

Responsive Management maintained contact with qualified, interested individuals as needed and provided the date, time, and location of the focus group, as well as a map and directions to the focus group facility. To encourage participation, a monetary incentive was given to participants.

During the recruiting process, Responsive Management maintained a progress table for the focus group that included participant names, addresses, telephone numbers, and essential participant characteristics. Responsive Management carefully reviewed each status update to ensure that each new recruit met the criteria. The focus group's target was approximately 5-8 consumers and 8-10 industry and brand professionals. Reminder calls and interaction with recruited participants prior to the group helped ensure their attendance, resulting in quality participation.

### **FOCUS GROUP DISCUSSION GUIDE AND ANALYSIS**

The focus group was conducted using a discussion guide in order to ensure that the discussion remained within the parameters of the research topic. The discussion guide contained general questions designed to elicit comments reflecting participants' attitudes, opinions, perceptions, motivations, constraints, and behaviors related to recycling. This data collection served as the basis for subsequent analysis.

Responsive Management conducted qualitative analyses of the focus group in three phases. The first phase was the direct observation of the discussion by the moderators and their subsequent notes during and immediately after the focus group. The second phase of the analysis consisted of the transcription of the discussion and review of the recording and transcription by other researchers. The development of findings into the report itself entailed the third phase of the focus group analysis.

**REPORT LAYOUT**

There are three sections in this report. The first section is dedicated to the qualitative findings from the focus group's consumer participants and their recycling behaviors. This section addresses recycling participation from several different angles.

The second section of the report focuses on qualitative findings related to consumer attitudes toward recycling and non-recycling. This section also addresses motivations for recycling behavior.

The final section of the report is dedicated to the discussion about improving recycling programs to increase consumer participation in recycling. This part of the discussion included consumers, brand representatives, and recycling industry professionals.

Throughout the report, verbatim quotations from focus group participants are shown in the relevant sections.

## FOCUS GROUP RESULTS

### RECYCLING PARTICIPATION

The recycling participation portion of the focus group addressed several aspects of participation: self-defined levels of recycling participation, locations in which participants recycled, and items participants recycled.

### MAJOR FINDINGS

- **Many people only recycle when it is convenient for them.**  
Some participants cited lack of convenience as one of the primary barriers to recycling. Non-recyclers described a lack of access to recycling information and receptacles as reasons for their limited participation, while avid recyclers often lived in or belonged to communities in which recycling was not only encouraged, but simplified through the use of labels, numerous recycling locations, and education.
- **Most consumers only feel comfortable recycling things they are certain are recyclable.**  
Many consumers seemed happy to recycle items they knew were recyclable, such as tin cans, cardboard boxes, or glass bottles. However, participants were generally not willing to investigate whether or not an item was recyclable if it did not belong to one of these categories. As such, many items that may be recyclable are likely being overlooked and added to general refuse.
- **Some people only recycle when they are required or encouraged to do so.**  
Some participants reported that their recycling was limited to the workplace, where they were required to recycle, or in the homes of friends and family members who recycled. In the absence of rules or encouragement, some participants simply did not recycle.

### Level of Recycling Participation

#### Findings

At the beginning of the focus group, consumers were asked about their level of recycling participation. Consumer participants represented a range of recycling participation, with some participants having recycled diligently for decades and others recycling only when it was convenient for them (a few others simply did not recycle at all). Even among those who did not recycle at all, participants seemed to be open to learning more about recycling.

#### Comments on levels of recycling participation:

*I'm a consumer, and I recycle whenever I can. I'm an avid recycler and if people in my apartment building won't do it, I do it for them. —Consumer Participant*

*I'm a professional organizer, and I recycle only when a client requests that I do. I am not a recycler. I have an open mind, and I am willing to listen to arguments, but so far, I haven't been persuaded.—Consumer Participant*

*I'm a consumer, and I recycle about one or two items a month and only when it's convenient. —Consumer Participant*

*I'm a consumer, and I cannot say that I recycle too often. —Consumer Participant*

*I am an avid recycler.* —Consumer Participant

*I am also a sometime-recycler.* —Consumer Participant

*I recycle daily. The community I live in encourages recycling a lot, so it's very easy.* —Consumer Participant

## Locations of Recycling

### Findings

Although there were a few dedicated recyclers in the group, the majority of participants described limited recycling, most often dictated by the availability of recycling receptacles, the behavior of those around them, or rules that enforced recycling in particular settings.

Several participants explained that they recycled at work because their workplaces had regulations that required them to do so, but did not recycle at home. Some participants recycled at the homes of friends and family who encouraged recycling, but again, did not recycle in their own homes.

Most often, participants reported a lack of convenience and knowledge as their primary obstacles to recycling. At least one participant indicated that a lack of confidence in the results of recycling and the motivations of recyclers prevented their recycling outside of situations in which they were required to do so (i.e., at the behest of an employer or client).

In many cases, participants who had a high level of recycling participation lived in an apartment building or community in which recycling was not only encouraged, but further promoted through the presence of recycling bins in multiple locations with clear labels and directions.

### Comments on where recycling takes place:

*When I recycle, I recycle at my mom's house or at a convenience store or a restaurant that has different receptacles that make it easy to identify what goes where.* —Consumer Participant

*Similarly, I recycle at home and at work, but it's because I live in an apartment complex and they have things separated out so it's easy to know what goes where. And at work, it's similar to that. There are places for bottles and cans and paper, so it's just easier.* —Consumer Participant

*I recycle daily, because when you're retired you find time for certain things you thought you'd never have time for. It's easy to gather up the materials, and this includes cardboard boxes, packaging, plastics, bottles, anything that you can recycle. All they had to do was set aside some space for it. In the building I live in, at the end of the hall there are two rooms and we just take stuff down there and deposit it in bins and then they are collected daily. Where they go after that, I have no idea. I only hope for the best. It occurs to me, though, that I live in a community that encourages recycling. It's been like six months or so that the community has been like this. If I have anything to recycle, I just dump it where it needs to go, and usually there are some mixed items there, but it's also conveniently located by the mailbox so I don't have to take everything like magazines and junk mail and that's less I have to take upstairs, so that's nice.* —Consumer Participant

*I recycle because at my job it is required that we recycle. So, one day the recycling police showed up and, apparently, we didn't have enough bins in our offices so I now have a blue bin in my office so I can recycle in my office and in the kitchen and in the hallway and everywhere. I also recycle in my apartment complex and I like the single-stream recycling, because you can just throw it all in a bag and just let someone else do the work for you. That's my take on it.*

—Consumer Participant

*The only time I recycle is basically for my job. I work in different counties and there are different rules and restrictions for different counties. What I don't understand is why and how that makes any sense in terms of the long-term goal. I am thinking, 'What in the world?' I work for someone who is a militant recycler, so I will throw things in the trash and she will go behind me and pull it out. Somebody needs to convince me that what is happening is aligned with the goal that we go through all of this effort for.* —Consumer Participant

*I try to recycle at home, but I only have that one big blue bin and I really have no idea what goes in there besides the cans and the plastic bottles. Cardboard boxes and other stuff, I don't know if you can recycle that. I just throw most of it in a combined sack and I'm not sure if most of it goes to recycling.* —Consumer Participant

## Items Recycled

### Findings

Most participants limited the items they recycled to those that they knew to be recyclable (e.g., aluminum, plastic, glass, paper). Participants reported not recycling other items because of uncertainty regarding the rules of recycling. Several participants were unsure of what is and is not recyclable, while other participants did not recycle certain items due to concern that mixing recyclable and non-recyclable materials could result in unnecessary waste.

When some participants were asked which items they recycled, instead of thinking in terms of delivering recyclable materials to recycling receptacles, they mentioned their own personal re-use of water bottles or plastic food containers. This type of re-using seemed particularly appealing to some consumers, as it reduces the need to purchase containers and similar products.

### Comments on items being recycled:

*If I think about it when I have a bottle or a can, I'll throw it in there, but a Tupperware or something like that, I don't know if that's recyclable.* —Consumer Participant

*[I recycle] plastic bottles, glass bottles, metal, cans, and cardboard. If I get a newspaper—I don't subscribe to a newspaper—but if I get one, I'll recycle that. Just in general, plastic containers from restaurants. A little cardboard, like used boxes or anything like that [I will recycle].*

—Consumer Participant

*So, I recycle for my own personal reasons. If I go to a store and buy a salad or something and it comes in a nice container, I will keep that container. Or if I buy water or something, I will keep that nice water bottle and put my own water in there, which makes it look like a nice new bottle of water so I try to recycle a lot of the paper and the plastic that I do get. For me, my daughter is always like, 'Mom, why do we have all of these bowls from the Chinese restaurants?' Those are where my salad goes.* —Consumer Participant

*Not really, [I don't recycle]. Every once in a blue moon if I am cleaning up around the house and I am going to throw away a stack of magazines that I've accumulated over a number of months or even an entire year, or if I just have a massive bag of something, then I'll just throw that all together, but other than that, not so much. I've tried it in the past before, but it's kind of an inconvenience for me in the sense of I live in a studio apartment and there is not really a lot of space, so I am not going to have a bunch of different bins in my house or anything like that. On top of that, even when I go into the recycling bins on my floor, there are basically two little bins that are for maybe fifty humans, and that's just on my floor and they are always completely full and it's like I don't want trash just sitting out in the garbage room, so I just kind of toss it in the trash. Because it is not the most convenient thing for me, I just really don't think about it.*

—Consumer Participant

## ATTITUDES ASSOCIATED WITH RECYCLING AND NON-RECYCLING

In this section, participants discussed potential external motivators and their impact on recycling behaviors. After a general discussion about the reasons for recycling or not recycling, several additional topics were presented. Participants were asked about the impact of environmental and sustainability issues, climate change, and social pressure on their recycling behaviors.

After specific potential motivators were addressed, participants were asked about any specific experiences that had changed or confirmed their recycling behavior.

## MAJOR FINDINGS

- **As was conveyed earlier in the discussion, convenience was a major factor in determining not only whether an individual recycled, but to what degree.**  
Single-stream recycling was mentioned as something that the recycling industry could do to encourage recycling. Focus group participants expressed interest in single-stream recycling because it did not seem to require any special effort or knowledge on the part of the consumer. Overall, participants indicated that convenience was a major factor in participation.
- **Environmental issues appear to have little influence on non-recyclers' behaviors.**  
Only avid recyclers said that they were motivated to recycle by environmental issues. Non-recyclers generally did not appear to be persuaded by the environment, sustainability issues, or climate change, even when avid recyclers emphasized the damage plastics can have on the environment.
- **Social pressure seemed to have a limited impact on recycling participation.**  
Although some participants indicated that they recycled more when coworkers or family encouraged them, when asked directly if social pressure influenced their participation, most participants agreed that it did not. Despite this consensus, avid recyclers still reported their own tendencies to apply social pressure to non-recycling friends and family members.
- **The behaviors of recyclers and non-recyclers alike are informed by personal knowledge and experience.**  
Most recyclers had experiences that either convinced them to begin recycling or cemented their existing recycling behaviors. Non-recyclers, in kind, felt that knowing that many recyclables still find their way to landfills is proof enough that recycling is generally not worth the effort.

## General Motivators

### Findings

Convenience is a major motivator for most people. Single-stream recycling was again discussed as an option for streamlining the recycling process and increasing participation.

Many participants indicated that having a better understanding of the entire process, especially the outcome and goal of recycling, might encourage participation. Some participants said they would be more motivated to recycle if they had better knowledge about what is recyclable and how to ensure items are recycled.



Some non-recycling participants again expressed concern that recycling is a pointless activity. Some participants were concerned that dirty materials or mixed materials might result in everything in a bin simply going to a landfill instead of any of it ending up at a recycling facility. On this topic, some participants suggested that they would rather not recycle at all than put in effort only to have the same result (i.e., no items being recycling because of improper sorting or handling).

### Comments on general recycling motivations:

*100% [convenience plays into my decision to recycle or not recycle]. —Consumer Participant*

*I know [other participant] mentioned the single-stream; I have never heard of that or seen that before. If that was a thing that was in my area or my community, I would use it. —Consumer Participant*

*Yeah, to confirm what I was saying and what she is talking about with someone else going and separating it, that would make a big difference to me, because as I said, I'm not really sure what is recyclable and what isn't, so usually it all just ends up in one trash bag, but if there was something where someone else was going and doing it, I think that would solve a lot. I don't really know how that would be implemented, but that's my main concern—just knowledge. —Consumer Participant*

*If it were clearer where this stuff was ending up, then I would do it. If there was a real benefit at the end of this and I knew this was worth all of the effort, but it is so time consuming and when I think that this stuff just gets chucked in a landfill anyway, that is just really irritating. —Consumer Participant*

*I am of the opposite mind. I think it takes three seconds to separate something. For me, this is the first I've heard of the single-stream recycling. To me it doesn't take much effort to separate it while using it, and then when I'm done, I have one bag for plastic bottles and one for glass bottles. I have another area for cardboard and another area for waste. —Consumer Participant*

*He said that the effort is in the separating and I think it's in the [details]. Maybe the label isn't recyclable, or maybe the top isn't recyclable, and maybe you have to rinse it out or maybe you accidentally got some food waste on it. If I put this in there, you may not accept it anyway. I think that whole process, which may not even be a process or relevant anymore today, I feel like that is the part that deters me from recycling, not the actual bottles go here and cans go here stuff. —Consumer Participant*

*I think, for me, it was just a habit when I started several years ago living in the apartment building I live in, and then being involved in civic affairs within the county where I live has also brought me in to meet other people who are extreme, more so than I am. It's just a way to educate myself and it becomes a habit like you make your bed every morning. It becomes part of what your routine is, and for me it doesn't take that much time and it's convenient, and I know there are benefits to your society for doing it. —Consumer Participant*

*I am the type of person that I can be influenced by my peers, so if any of my friends ever recycle then I would keep a box and I would give it to them. I know they recycle, so I will keep this and I will give it to them. My friend has an app where if you go to Walmart and then something pops up*

*on someone else's flyer that is cheaper, then you can get the money back, so I give my friend all of my Walmart receipts. I only had one friend that ever recycled and when life starts to happen, it's kind of like the first chore that she kicked to the side and was like, 'Okay, I'm not doing this anymore. It takes too much time to think about it,' or whatever the case is. But, if just one person in my friend group would do it, then I would be more inclined to do it. —Consumer Participant*

*I don't know if it necessarily influences my decision to recycle or not, but I do know that at my job, I've seen a recycling bin before, and I know someone else mentioned not knowing exactly what goes in the bins as far as what if you eat something and it has food on it or something of that nature. I've seen literally everything go into this bin: Kleenexes, food, meal container. It's kind of a thought process where I have thought, 'Well, that's a garbage can.' Is everything recyclable at that point? Like I said, I don't necessarily know if any of this has influenced my decision not to contribute to it, but I just think to myself, if all of that goes in there, it can't be right. —Consumer Participant*

## Environment and Sustainability as Motivators

### Findings

Regarding the influence of environmental issues and sustainability, participants were fairly evenly divided. Some consumers, particularly non-recyclers, did not feel that environmental issues and sustainability played a role in their decision not to recycle. Some recyclers, however, said that environmental issues were a major (if not the most important) influence on their behavior. Most participants who suggested that environmental and sustainability issues were motivators identified as avid recyclers.

### Comments on the influence of environmental issues and sustainability on recycling:

*It influences me a lot because the environment that we live in is changing. We are recycling because it is a way to put jobs back into the communities, it's a way to educate our consumers on how important it is to recycle, and it's also how the different municipalities are involved in recycling, because there is lots of signage. They make it so easy for you to recycle that you can just read the little blue can and it tells you what to recycle or in my community, they write it in big letters on the trashcans: 'Don't put this here,' or on the door before you even get into the trash area, they write what not to put in the recycling areas. As a consumer, you have to educate yourself on what it is that you need to do to help the environment around you, because what we do for ourselves now will help the next generation to come. —Consumer Participant*

*Where I live in Northern Virginia, the community or the county government emphasizes strongly environmental issues, so it's constant. It gets to be sometimes too much. But on the other hand, they do sponsor countywide programs for recycling computers and trying to educate people of all ages. When these events do occur somewhere in the metro area, there are local media representatives there and it does educate and it does inform. The encouragement and the purpose of knowing your tax dollars are going to something is like having a buy-in to participate. Another thing is, I haven't taken any old computers or printers over there, because I can usually find someone who needs those, but I want the hard drive first. I take out the hard drive and I destroy that later, but the rest of it is used. And going along with some of the other comments, I am not sure what is available and what can be recycled, but sometimes if you're not sure, you can just contact the company and ask about the garbage before you put it in a recycling bin. —Consumer Participant*

*The environmental components of recycling, you know whether or not that recycling ends up in the same landfill as all the other stuff, I don't know, but I would rather take the chance of it not, and that's why no matter what, I cut up those little plastic six-pack holders. I don't want them floating in the ocean, but if it does, it's better that it's cut up. —Consumer Participant*

*I love the environment as much as anybody, but I would still like to know what the purpose of all of this is. We're sheep. We're just following along and doing what we do, but what's happening? I really want to know what's happening. I never get a clear answer on that, especially now that [inaudible] not taking a lot of our recyclables anymore. They are all going to get shot into a landfill. Right? So, we are still going through this same process. It's very frustrating. —Consumer Participant*

*No, I am not motivated by the environment component, but I do know that everyone over there is getting paid from consumers recycling, but the consumer gets a good feeling on the inside. You guys are making money and we're sitting here going through all of this effort and work and the money is going in your pockets. —Consumer Participant*

## **Climate Change as a Motivator**

### **Findings**

As a distinct issue, climate change seemed to be less influential on recycling behavior than other environmental issues. Some participants felt that the intangible goal of slowing climate change made it difficult to see this as a strong motivator. In contrast, others argued that recycling was not a difficult task and required very little energy from consumers; as such, they argued, recycling represents an easy way for consumers to help address climate change.

### **Comments on the influence on recycling from climate change concerns:**

*I understand that this is a big concern—climate change and the environment and everything—however, just because it doesn't immediately show when I recycle the difference it makes from so much time, effort, and money you have to put into different causes and charities and things, it doesn't motivate me as much as all the other elements I listed. —Consumer Participant*

*I just wanted to add to what I said earlier, it does matter to me. I just try to do whatever is possible. I don't own an electric car or anything, but you know that is something I aspire to have. I try to do everything that I can to help with climate change. —Consumer Participant*

*I think there is a lot of hubris in that—thinking that the United States is really going to make a huge change by doing our part in this issue. The rest of the world isn't. I love the environment, but I just don't see the point. I just don't get it. —Consumer Participant*

*I guess it would help if someone could tell us—some of you who do recycling here—how do you use your recycled products? Maybe you could educate your consumers as part of your advertising blitz. There is some convincing that is possible, so please don't give us dumb ads like we're stupid. We're not stupid. As consumers, we often know what's going on, so be upfront with information. —Consumer Participant*

*I'm aware of the effects on the environment, as far as like you mentioned global warming and things of that nature and how climate change is constantly affecting us, and you see in the media*

*that there is pollution in the ocean. I guess one of the things I have to think about is that it was more in your face as a kid through school programs, and you were very easily influenced then, and we wanted to make change in the world so that we could do our part. I think, though, as an adult, it sounds selfish, but I am more worried about myself, and I am not as concerned because I don't see the immediate effects. Like people were saying, it is just not something that comes to my mind—doing my part and helping the environment. —Consumer Participant*

## **Social Pressure as a Motivator**

### **Findings**

Focus group participants indicated that social pressure may not have much influence on recycling behaviors. Interestingly, though, some of the more avid recyclers indicated that they still tried to encourage their friends and family members to recycle as often as possible.

At least one participant discussed the use of social media in applying pressure to recycle, although this person also seemed somewhat doubtful that social media posts encouraging recycling would be likely to greatly influence behaviors.

### **Comments on the influence of social pressure on recycling participation:**

*I guess on my job, it's partly what we do. Montgomery County is one of the counties where you have to recycle. The recycling police come to your job and check on you and go through your recycling bins, but as far as social—I am not a social person, but I do encourage my family to recycle because it's part of what we need to do to help one another. But I also agree that, as far as the talk about the environment, there are so many other toxins that are in the air and coming off of airplanes and coming off of cars and I think a lot of emphasis needs to be put on the amount of bad air that we get from all of the other issues that we have besides recycling. Recycling is a great thing to do, but what about the cars and the planes and all the other issues that go on in our daily life. —Consumer Participant*

*I personally don't receive much social influence from my family or friends. I can only really think of one person that I am, for the most part, close to that's I guess what you would call an environmentalist. At the very least, I remember, and it's not about recycling, but I had made a comment to her about how on one of the hot summer days we had here I had left the air conditioner running and she shamed me for not being home and the thing she said was, 'Please help the environment.' But, outside of that, my social circle isn't really putting any pressure on me to do anything of that nature. —Consumer Participant*

*I don't feel any social pressure to recycle or deal with the environment, or if it's there, I just don't care because I have other things to focus on. —Consumer Participant*

*I know people are pretty horrified when I say I do not recycle, and I get that look of 'What?!' And then when I tell them a little bit about how I feel, then they're like, 'Oh.' But then they go back to their thing, but at least it's a thought. But, yes, I am a fearless non-recycler. —Consumer Participant*

*I have a question for [other participant]: you say you don't receive any social pressure, but you kept saying that you are on the liberal end as far as saving the environment and want to save the world. Do you put that pressure on your friends and family? —Consumer Participant*

*Not directly, no. I guess we're all adults and we all have responsibilities and as far as my age group, I've been influenced by folks that recycle and are very into—well they are almost warped environmentalists—and if you want to be my friend or I want to be friends with somebody, I want to have something that I will get along with you and not scare you. And I don't want to have my time spent on just one cause, and I hope that answers your question. —Consumer Participant*

*I didn't necessarily mean as far as pressuring anyone, but you know, similar to my friend who I had mentioned with the comment about turning your electricity off, it wasn't necessarily like lecturing someone or always trying to put this on them and say 'Hey! You've got to save the world.' Just like, do you have casual conversations about it? —Consumer Participant*

*Yes, I have casual conversations with some of my friends and apartment neighbors about recycling. I ask if they participate by putting things in the bin at the end of the hall, but it is a voluntary thing. When I was working in the district, we had something similar and I don't think we called them the recycling police. I think we had a worse name for them, but they were from the district government and they came around and inspected the garbage bins. That's kind of a sideways influence to do things at home. In other words, there was pressure that way at work, because they were fined for something regarding this and all of a sudden there are more bins and recycling materials for the plastics and whatever. So that's sort of in the social influence sphere, but since I've been retired a few years now I still have a conscious attitude toward it, but I don't have peer pressure. As for my neighbors, I am not going to be the recycling police for what my neighbors are doing and being, again, involved with civic affairs locally, I do see more of a consciousness by some folks. So, I would say it has had an indirect influence. —Consumer Participant*

*[Social pressure does] not really [play a role]. Almost everyone that I know recycles. I've found it surprising that when I took the spot out there, I didn't see any blue bins. If it's somewhere like that where there are no blue bins, then I will just try to keep it with me because there are usually some on the streets so I'll put it there, but I don't really get much pressure. —Consumer Participant*

*If I can jump in on this question, I think it's interesting because with my age group, and I'm assuming it's probably one of the younger age groups on the panel, we're recycling. People love to, but the only social pressure I ever feel from it is when people share videos and other things on Facebook and everything—I am sure everyone has seen the video of the turtle with the straw and all of those things. But when we're around D.C., I can be out with those same people and I throw a can away, and no one is going to do anything or directly say anything like, 'Wait. You should recycle that.' No one is ever going to stop and tell me not to do that. I feel like a lot more social pressure is shared indirectly over social media sites, but once it's been a week or so nobody cares about it anymore. —Consumer Participant*

## Motivation for Changes in Recycling Behavior

### Findings

Participants offered several examples of instances in which their recycling behaviors changed or were reinforced. For example, several participants pointed to the implementation of single-stream recycling as a behavior-changing event; others named instances in which they had witnessed conspicuously wasteful behavior as a moment inspiring change in their own behavior.

Comments from consumers made clear the importance of making sure that people have positive experiences with recycling to encourage future recycling, as negative experiences are likely to reinforce negative behaviors or opinions on recycling.

### Comments on changes in recycling behavior:

*Well, my turning point was the single-stream recycling, so that I no longer had to separate everything. Now I just throw it in that bag, and I am just so happy about that. The consumer needs to know about single-stream recycling, because once you put it in that bin, it gets sorted at the other end. That's what I really like about it; I am just so happy about that. —Consumer Participant*

*I think [my behavior changed] Two years ago, when I started doing personal organizing. I was not a good recycler, but then it was just reinforced wholeheartedly as soon as I was going from this town over to this town and we had different recycling rules for every place. So, I am like, 'Where is this stuff going? Does anybody care where this stuff is going?' What are we doing this for, and no one seems to follow through with this stuff and we have to do the cardboard and we have to do the plastic and in this town, we don't have to do any of that. This is ridiculous. That was my big turning point. I am like, 'Show me the end result,' and I just don't see where that is. I am open to hear it, and I think there are some benefits somewhere, but overall, with the militant nature, some of the things I've come across are unbelievable. It truly is a religion for some people, and I'm Catholic and I'm saying that. —Consumer Participant*

*When my mother died a few years ago, when my siblings and I were staying in the Midwest where she died, I asked the assisted living staff if they had recycling there, and they said no, but I do know that in the small community I grew up, where she lived and died, they do have some small-scale recycling. That was a turning point, because I saw so much stuff that just went into the dumpster and we just kept filling the dumpster when we were cleaning her home. I just kept thinking there are so many products in there that were not given to other residents, and they could have been recycled so easily. That was definitely an influence, and it made me wonder why isn't this small community recycling more? —Consumer Participant*

*This isn't really related to the question, but I grew up in Charles City County, Virginia, and it was a small town in between Richmond and Williamsburg, but we had a landfill there and we didn't have any trash dumpsters coming by or any dump trucks coming by or any recycling trucks coming by. What we did was take out our trash bags to a fire barrel and we would burn it, and once it was filled with ashes, we'd take the ashes to the landfill and dump it. That's what I was raised on, and then I went to VCU and they had the different bins, so that was my first real experience with recycling. I guess I was already behind the curve. —Consumer Participant*

## OPINIONS ON IMPROVING RECYCLING

In this section, consumer participants discussed ways to improve recycling programs, increase recycling participation, and develop a better understanding of recycling and its methods and goals. Following consumer comments, brand representatives and industry professionals were invited to provide input and answers to questions that had been asked by consumers throughout the focus group.

### MAJOR FINDINGS

- **People would be more likely to recycle if receptacles were more widely available.**  
Some consumers mentioned the lack of recycling receptacles as an obstacle to recycling participation. Consumers felt that providing more conveniently placed recycling bins would increase their recycling.
- **Communication and education are key.**  
Consumers desire more communication and education about all aspects of recycling. Participants mentioned a desire to understand more about the recycling process from beginning to end. Participants also expressed interest in how recycling affects the economy on the local, state, national, and global levels. One of the most important takeaways from this portion of the discussion was the apparent desire among some consumers of how to be better recyclers.
- **Some consumers are discouraged from recycling because of their concerns about wasted effort.**  
On this topic, a few industry professionals confirmed that mixing recyclable and non-recyclable materials or improperly handling recyclable materials can result in recyclable materials not being recycled.
- **The industry is willing to help educate the public.**  
Industry professionals who attended the group encouraged consumers to come to their facilities and observe or take part in the process of recycling. One industry professional suggested that some recycling facilities offer classes and provide information to help answer the questions that emerged during the focus group.
- **Recycling helps the economy.**  
Brand representatives and industry professionals wanted consumers to know that recycling creates jobs and is financially beneficial for communities.

### Consumer Input on Creating Better Recycling Programs

#### Findings

Consumers were asked what the recycling industry could do to increase consumer participation.

Most participants agreed that increasing communication and education could have a major impact on recycling. Throughout the focus group, some participants expressed confusion over the perceived complexity of recycling guidelines. Many participants said that they would recycle more if they knew more. In particular, participants wanted to know which specific items and categories of items are recyclable, how items must be prepared or handled in order to be recycled (i.e., removal of labels or cleaning/rinsing of products), where items should be recycled, and whether recycling guidelines differ from one municipality to the next.

In addition to a desire to understand the process of recycling, some participants indicated that they would like more information about the global state of recycling. Specifically, conversation centered around the role of China in buying recycled plastics from the United States.

Again, consumers clearly indicated that their recycling would likely increase if more recycling receptacles were available. Several participants explained that they are often forced to search for a place to recycle (i.e., they have to leave home to recycle). This inconvenience was said to discourage recycling.

### **Comments from consumers about creating better recycling programs:**

*I think someone said this earlier, but better communication about where the recycling place is, and there needs to be better signs of what goes where. For me, I know sometimes I'm like should I put this in this bin, because I don't know if it should go in there. I've noticed in some places they have 'This is what does go in here,' and 'this is what doesn't go in here.' I think that would be beneficial, just because there are sometimes where I don't know what should go where.*

—Consumer Participant

*I live in an apartment complex in Woodbridge, Virginia, and we don't have any recycling there and the closest recycling receptacle is around the corner at a commuter lot and that's what my one friend used to use. So, if it was more acceptable or visible or available to me, then I think that I would have a change of heart.* —Consumer Participant

*I think it would be good to convince more people through more education but not beat someone over the head with it to inform and to also answer some of the questions we've heard here about where this stuff goes and is everything recyclable. What are the responsibilities now? What are the facts? And I don't like the idea of the recycling police. I think that has a negative connotation and in some cases that might be what's necessary, to force people to change their behavior, but that's not really what I am talking about. I'm talking about an attitude change, a behavioral change, and I think it would be helpful from corporations, as well as the federal government, or any government to say, if you are going to participate in recycling, 'Does this help?' And I think it might help sway some people if they have their answers. The questions we're hearing here are very legitimate, we just need to know the answers. I have to say, I don't know what all the answers are. And I wanted to add something about where I live: we must have single-stream, but I didn't know, but I put all the stuff in one bag and take it out in the hall, and I just want you to know that the bins are full.* —Consumer Participant

*My question to you as a consumer is, often times I see something that says 100% recyclable; however, it doesn't identify what is recyclable. So, often, as a consumer, I want to know what 100% recyclable really means. If it's true in what it says, we need to educate the consumer on how important it is that if you are recycling plastics, paper, and all that, this is the product: we're rebranding it and handing it back to the community that it's actually coming from.* —Consumer Participant

*I also think that education of the important subject could be beneficial. We touched on education before and how it's good for children, but as adults we get caught up in our own worlds and it's not necessarily at the forefront of the bottom line. Yeah, you don't want to be in an afterschool special for adults having issues, but television ads would maybe be more of a bottom line corporate initiative. It sounds like some people here have jobs where they really push that and*



*someone said their office can be fined for something having to do with recycling. I don't know what's the balance, or anything like that, as far as what you would want to see and what you would not, but my biggest thing is it's not necessarily something that's on my mind or a bit of concern for me, so I just don't think about it. Having the ability to educate and maybe put it where people who need to understand the importance of it can have that reminder. —Consumer Participant*

*With the fact that China isn't really taking a lot of the recyclables that they were before, and that's going to be impacting us quite a bit, does that change in any way how we're expected to recycle? Why not? That stuff is still going to a landfill, right? —Consumer Participant*

*I can speak for myself—I can't speak for everyone here at the table—but every one of our products has been recycled, and this has been going on with China for over a year. Now what's caused this is that China is trying to clean up their own home. They are trying to establish their own infrastructure from a recycling stand point, and if I just throw some simple knowledge at you: there were 15 million tons that went to China that has now diverted to other markets, other export markets, like Asia, Korea, and some of it has come back. In the Northeast, though, nothing has been landfilled and it has affected simple supply and demand in terms of the materials, like paper, some cardboard, which typically does get exported out of the Northeast and from the West coast. Everything is status quo in regard to recycling, and then in regard to the whole country, I can only speak for the Northeast. Folks in the west and the south, they can give their perspective, but I don't think there is much change there. I say this all the time to all of our communities, but we have [these facilities], and every community that comes through our facilities [learns]. We have an education room in every one of these facilities and I would recommend that trek to where your recyclables go. I would go and visit where that recycling facility is, because it will be amazing to you. Every person and every community member that comes to us is amazed. Pictures are worth a thousand words and when you walk through our place and you see, especially our single-stream place, which everyone seems to think of as a convenience, [you learn a lot]. I work for a material recovery facility and they handle all of your recyclables. If you get a chance, you should go visit and get to know the manager. Include your community. Have your community go with you to go visit them, and you will be amazed. You'll be astonished, and you'll be convinced that that material is not ending up in a landfill or an incinerator. —Brand Representative Participant*

*I can weigh in a little bit on that, too. For a time, I think the misconception around plastics, particularly, was that China was taking low quality types of plastics, so when they stopped doing that, and they weren't taking all of our plastics, we took what may have been considered a contaminant, like some cups, and we were able to take what was once considered a contaminant and change it to a commodity. So, then your cup has a system to come to our company, and that's creating jobs along the way to be able to do that. You may have encountered today different cups, storage totes, shelving, and likely razors, tooth brushes, the car that you drove here, if you do any painting, all plastic paint cans, those are all made from recycled polypropylene and it has a high quality. So, hopefully that answers some of your questions about where it's going and whether it has value or if it's real. I can't tell you that it's not all going to the landfill, but we're doing what we can, and we need it to come to our facility. —Industry Professional Participant*

*I'd like to know what is being done with medical waste recycling. Is it [recyclable]? Can it be? If it's not, why not? We are smart people and we're a smart society. There's no reason why there isn't something being done, and I know there is cost, and cost can be prohibitive, but what is the*

*long-term cost of recovery? That's what I think is important on the next horizon, or next level of recycling. —Consumer Participant*

*I think he said something about it, but we don't see the immediate effects of recycling, and I think that if there was some tangible value associated with the consumers' efforts in recycling, then you would get more people to recycle. —Consumer Participant*

*I think it would be cool to know more about what they're doing for future projects. I think it was you who said you work in making all of these cups 100% recyclable. I think somebody else made the point that if we're just recycling cans and not really doing anything with the big companies, then it doesn't really motivate, but I think we can strive for progress if we knew and really motivate a lot of people. —Consumer Participant*

*There is a lot of media attention on recycling, but the recycling community needs to know what does recycling do for the consumer. If the consumer knows that recycling saves lives and puts jobs back in the community and there are all of these really great things for our environment as well, then the consumer needs to know, 'Hey! This is what recycling can do for your community as well as the overall health and well-being of others.' —Consumer Participant*

*I think, at least for me, I have been talking about plastic bottles, cardboard, and things like that. Some things I don't think about as often are old clothes, furniture, and things like that. I don't really know what to do with them, except for take them to Goodwill. I think it would be interesting to see some of these companies partnering with organizations like that to be able to make that an easier thing to do. —Consumer Participant*

*I have one other item, and this goes back to when I lived a few summers with my grandmother many years ago, but it was about the use of water, and she always made sure I turned off the water after you wash your hands. So, we have a lot of products that are helping to reduce water consumption, but again, what can we do to help conserve water on our own without having some gadget there to do it for us. And, also, how much water is being consumed to do all of this manufacturing, this recycling for products? I think that would be helpful. And what are the environmental standards on that? Are you adhering to them? Are there environmental standards to adhere to? That's the only other thing I want to share. —Consumer Participant*

*[Participant] and [participant] mentioned this. [Participant] was reusing her Tupperware, and [participant] was conserving the water. When I was growing up, we had that little slogan: 'Reduce, reuse, recycle.' With reducing and reusing, we see immediate results from that. I don't have to go out and buy more Tupperware or I don't have a high water bill or a high electricity bill, because I am turning off my A.C. Whatever the case is, you see the value from that directly. —Consumer Participant*

## Industry Input on Creating Better Recycling Programs

### Findings

Industry professionals were asked if they had any additional input on how to institute better recycling programs.

Brand representatives indicated a desire to participate in the process of recycling by creating products that use recycled materials. Some brand representatives suggested that brands' use of recycled materials is one way to show consumers the tangible results of their recycling behaviors.

Consumer participants reiterated issues associated with lack of knowledge about the recycling process. One industry professional suggested that many of the questions that had been posed in the focus group could easily be answered with an internet search. However, some consumer participants seemed dismissive of this idea, suggesting that such searches are time-consuming and/or inconvenient.

Industry professionals seemed to agree with consumers that more education and information could improve the state of recycling. Industry professionals discussed the fact that additional information could reduce the number of “contaminants,” or non-recyclable materials that are sometimes mixed in with recycled materials.

### Comments from industry professionals and brand representatives about improving recycling programs:

*I have so many questions. One of the questions that I have that I wanted to jump in on, is those who do recycle, which are actually many of you, have you ever looked up whether or not something was recyclable? On a website or looked on the recycling container itself? —Industry Professional Participant*

*Aren't there different numbers on the bottles and stuff, like number 4, you can't recycle, but number 1, you can, or are all of these different numbers for something else. That would be the only reason I would look something up, not to actually determine what goes where. —Consumer Participant*

*Generally, it's on the product you bought. It will say it's 100% recyclable, or it's not recyclable, or just like with the microwave: 'Don't put this in the microwave.' A lot of that information is actually on the product that you bought. —Consumer Participant*

*I have not, because what I recycle is only what my building will let me recycle, so whatever we have, and then it will say it can go in this bin or can't go in this bin. I just base it off of that. —Consumer Participant*

*I also have not actively gone out seeking information or anything, but one thing that comes to mind that I have seen before is with packaging, similar to what [participant] was saying, I think the one that pops into my mind the most is when you're buying computer paper and there is often a message on that that leads my decision to purchase it, but that's the one time that I am really*

*aware that a product that I may be purchasing is recyclable or actually recycled.* —Consumer Participant

*Just because I have experience from county to county, certain things are recyclable and certain things aren't.* —Consumer Participant

*Well, what about [looking it up] to find out whether it is recyclable where you are or not?* —Industry Professional Participant

*I think the question now is why is there a difference in different locations?* —Consumer Participant

*We are all different recyclers, so they take your material, they sort it, and they have in-markets. So, let's say... they recycle this bottle, I don't want that to be put back in the bottle. If they find an area where they don't have an end-user that wants to buy a particular material, like if you don't have someone down the road to buy your polypropylene or your shampoo bottle back, they might not take that material because they don't have an end-market. It's more about the actual collection systems that we have in place and, while they are very close together, I understand the question why would this community do it and next door, they don't. There is some unification we need to be better about as a broader system, and I think they would all agree, and we are trying to make it better, but it is learning from consumers, like yourselves, to see what makes the most sense. Is it hearing the numbers? Is it seeing the packages that you can put in? How do we help guide that conversation so that at the end of the day when you go to plan an event, you know that I am supposed to put this here and I didn't need to do ten things and wave it in the air and then put it in the bin, right? How do we make it really simple? So, I think some of the feedback we've received today was helpful, and I am sure anyone else on the internet will want to jump in here.* —Industry Professional Participant

*I'm always down the road, and though Alabama seems really far, we bought some from England a couple of weeks ago, because we can't get enough from the states. In our case what we are seeing is, and this is something I think we probably assume consumers don't care [about recyclables], but I think we're hearing very differently today. I love this, by the way. This is wonderful to give me insight. I think a mistake we've all made is we get asked to speak so much all the time. My kids haven't seen me in two months, because we have been talking and talking about recycling, but the opportunity to listen is so helpful. To [other industry professional's] point about the infrastructure: so, from community to community, you have different material recovery facilities. This is where the materials come in, you sort, etc. For every type of item that is being sorted, and I'm not talking about that item in terms of packaging, but in terms of materials, there is technology behind that. We have some really outdated stuff, and all of you can speak to this, but people all across the country are having to invest money into their facilities, so if I come along and say, 'I am going to take your [yogurt cup] and here is what I will pay for and I need as much as you can send me, they are limited in space and money and what they can do, so when China came in instead of telling the communities and the consumers, maybe because they thought it didn't matter, because you guys weren't paying attention. But you are, we are learning today, instead of saying, 'Hey, we can't take this right now, because we need to get some equipment and we need to make some investments,' they just said, 'you can't recycle it.' And that's not true.* —Industry Professional Participant

*So, I have to add to this, and this is the last time I'll talk. We share all over the country much more than other countries, so the basics, if you're talking about just paper, cardboard, plastics, metals, glass, all over the country it's not about local markets, we ship to Alabama, to Dallas, Texas. So, the basics are there, but one of the differences that you may see in the acceptable list may be some small items like a cup, or a number 5, or a number 7, or whatever. The basics are there, and I should speak for this group, because I know for a fact that all of the basics are there with the five or six components I just described. They are acceptable really through the country and they have nothing to do with local end-markets. You will find markets and we have found markets over the past year during these tough times. —Industry Professional Participant*

*If I could reinforce [other participant's] earlier comment: ...I don't know for the Northeast, but they have national averages of contaminants from single-stream, and it is 24% or higher. That's nearly 30%, so contamination is those materials that can't be recycled, or maybe it's mislabeled as being recycled. It's a big challenge. As a glass container producer, I've got suppliers over here and I'm sending some down there, and not a lot of help in between. There are markets, and sometimes those markets are reachable and sometimes they are not. If you go back to what are we recycling and I think we started that in the good old days, but in the good old days you had paper, plastic, steel, aluminum, paper, and glass. Now we have complicated all of that, because I know we have made a lot of design for recyclability from our consumers and thank you for that. We all need to be product designers: we design for recyclability and for the job. We heard that from some comments, but without that, we have complicated it, as brands, as consumers and what we want, we've complicated what's happening. They've got a big challenge, but hey, where there are markets, there is value. It's valuable to us—we buy 5 million tons a year, we could buy more. It makes sense for the entire system. —Industry Professional Participant*

*We have been told that our glass is not recyclable anymore because of the mixing of the colors, because different elements go into making different colors of glass? —Consumer Participant*

*Yes, there are different colors of glass, and if I want to make a clear bottle, I would need clear glass. There are some colors you can mix in, but at some point, it doesn't work anymore. For example, in a clear bottle, if I go to 50% recycled content from the curve, it has some green in it, it has some brown in it, it has some blue in it, and those colors can work because of technology. It's \$250,000 for one of those machines, so it is expensive and that's an investment, but at 50% recycled content, your bottle would be Georgia Green, about the color of a Coca-Cola bottle, and you just can't take all of the color out. Now, you can use what's in the three mix: brown, green, and clear all mixed together. —Industry Professional Participant*

*I think that [other participant] made the comment that we are complicating it, and that is absolutely true; even I am confused right now. And that is pivotal for consumers and I am going to kind of step out of my industry shoes here for a second, because at heart, I am just basically a hippy who is really hardcore about this, and a true believer, as we call ourselves. I think that as a consumer, we have a lot of power and influence in this process to make it less complicated. You've got folks like us sitting here and you can influence us through your municipal government. My company holds a number of contracts with municipalities where we live, and municipalities are our client, right? We're going to do whatever the client wants us to do. There's a cost associated with that, but ultimately the client is you and you have that avenue to influence as the client. And over on the product side, on the side of the people who are actually making the bottle or actually making the packaging, you have the ability to influence them and that helps us as well. That is one thing that I would shoot over to Coca-Cola and Keurig Dr Pepper to make this*

*process less complicated, how can we think about systems that create fewer varieties of plastic. If everything could be polypropylene and polyethylene, if those were the only plastics that we used to make plastic products, we would have a really simple recycling stream, right? You wouldn't have all of these numbers that you would have to deal with, and it would be really easy. You would know that everything goes into one place, so I say all of this to kind of give you guys a little bit of influence. I think you have an insane amount of influence as buyers of these products and as members of your communities to basically tell us what you want to do. From my perspective in operations in the company that we run, we're doing this because you're here. You're producing waste. We're not a business if you don't, so there is a natural partnership there.*

—Industry Professional Participant

*I guess I work with pretty much all of the counties in the area, and I work from the street side, so I deal with a lot of the consumers and the residents, and you see the different counties recycling different ways. Like, Montgomery County is still doing dual-stream, so it is still separating the paper and the glass and the plastic. And in Anne Arundel and Prince George, we're doing single-stream. When you've got people moving from different counties, it's confusing, like she said, how do you recycle? It is very difficult for the resident. Me, as a hauler, even to get my crews to understand how you need to do it as you change from division to division is very difficult. I think education is the key in putting it out there. We started a recycling program in North Carolina because there was no recycling at all, and we wanted to get the county to say, 'Hey, we need to put a recycling program together,' so we put out 33,000 recycling carts. They gave out a flyer. They gave it to these people in rural North Carolina on how to recycle. We got car engines, transmissions. [They thought] everything was recyclable. But, what do you expect when you tell somebody, 'Hey, I'll give you a bin to recycle,' and in their minds, everything metal can go in it. We had six months of pure contamination, so you have to educate the customer, because they don't know.* —Industry Professional Participant

*I want to jump in as the local driver. First of all, thank you consumers for being here. This has been helpful, and it's been great to hear your feedback as to why you recycle or why you don't recycle, but I did want to dispel a myth that the industry is making money off of recycling. As a local government, we are not making money off of recycling. We pay a fee to whoever is picking up the recycling. We collect it ourselves, but you may have a private hauler, such as some waste management or some public services, but we pay for them to process our recyclable materials. At one point, we did get a rebate, but now we're paying \$25 a ton, and that price can change depending on the contract that your local government or the community where you live has, but I just want you know that it is also not free because there is labor, fuel, and equipment costs, and the tangible value to you, as a consumer, is reflected in your taxes, in terms of what you pay. I just want to make sure that you all understand that that is why you see some of the different costs or why you pay a recycling fee or see a solid waste bill in your community. That is reflected in that.* —Industry Professional Participant

*There are a lot of people making money off of this. They are lining their pockets with this money. I think we have identified 360 manufacturing facilities in the Southeast with 98,000 people with manufacturing jobs that are dependent upon this material to survive. I don't think that's the issue today. I do want to commend the non-recyclers for having the guts to come in this room today. We stand, some of us, thirty-plus years on this education component and maybe we need to recognize when something is not working. We need to adjust it. We need to work on communication, because what I have heard today is, 'Why do it? How do we do it?' The 'why' I think we all can accept that there is an environmental benefit to it. That's pretty standard. There's a tremendous*

*economic opportunity, in addition to what we have already recorded in the Southeast, I know there is another group that is represented here who have incurred over half a million jobs dependent on recycling in this country. It is a significant part of our economy, and it does depend on the decision at the point of generations of material to move it from collection to disposal, and that's the part we're used to as a consumer, and a small business will have to make that choice for this to work. I think the how part of that we have times where we fail, because if we have contaminations, that means every fourth product going into the bin shouldn't be there, and that's not your fault, that's ours. And we've got to retool how we get there and we've got to make it consistent, and we've got to reach you, because unless we've got you convinced why, and particularly to dispel this myth that it is all going to landfills, we have got to show you that this change has had an impact on pricing. That has an impact: the material still moves, and that's only 15% of the total market, and those jobs are still out there and the products are still coming back to our shelves in retail. —Industry Professional Participant*

*Could you please be very specific as to some of these questions. And what I mean by this is for [other participant's] question of 'What happens?' I don't consider myself well-educated on this, and I understand an aluminum can, when you put it in recycling, in six weeks it's back at Coca-Cola or Anheuser-Busch, but if it goes to the landfill, it's 200 to 500 years before it biodegrades. Plastic—I don't know if those folks know this, but plastic never biodegrades. It doesn't go away, so when it doesn't get recycled and it doesn't get moved into some other kind of plastic, it gets smaller, it photodegrades and it gets smaller and smaller, but it never goes away. The decision to say, 'Hey, it's kind of difficult or I don't want to do this, because I don't know what happens to it at the end,' these guys are telling you. How many million pounds of glass become the Dr Pepper bottles? How many millions of tons of glass every year that you recycle become a Dr Pepper bottle that you're drinking out of again within thirty days? —Consumer Participant*

*Thirty days from bin to shelf. That's what it takes. —Industry Professional Participant*

*But the thing is about this disposable bottle that your companies or whomever is generating, now becomes our problem. See what I'm saying. It's our problem. —Consumer Participant*

*Not if you don't purchase it. Don't buy it. Don't buy the plastic if you don't want the plastic. —Consumer Participant*

*No, I don't. It seems to me like you're not hearing when they say 5 million tons of glass are getting recycled within thirty days. You're like, 'Meh, that doesn't count.' Six weeks for aluminum to be recycled and then it gets reused, 'That doesn't count.' —Consumer Participant*

## Recycling Mistakes

### Findings

Consumers, brand representatives, and industry professionals were all asked what they believed to be the biggest recycling mistakes made by consumers.

Industry professionals suggested that the primary mistake of many consumers make is to overcomplicate recycling. Several of these participants advised consumers to focus only on items that are clearly and obviously recyclable, such as plastic and glass bottles, tin and aluminum cans, paper, and cardboard. It was mentioned that the responsibility of keeping the public informed about recycling processes and eligible materials should lie with brands and the industry, not the consumer.

One clear message from recycling industry professionals and brand representatives is that recycling matters. Many industry professionals expressed concern that consumers did not realize the impact of recycling and buying recycled products.

### Comments about recycling mistakes:

*To make it less complicated, I would like to see consumers starting out by not sweating the small stuff. Let's focus in on really easy things that we know about. It's great that we have someone from glass here. One glass bottle becomes another glass bottle. It's very easy; we can put our hand around that. Let's focus on the paper; the majority of what we are recycling is from consumers' homes and offices and some kind of paper, whether it be a notebook or a piece of cardboard. If that doesn't end up getting recycled, it ends up in a landfill. And that's where the real impact is. From our perspective, we try to focus people's attention back on those big items and away from—we can get in the weeds on plastic for forever and it is important, incredibly important that we solve some of the issues around recyclability with plastic, but what consumers know and don't know is ultimately—let's just focus on the big items that you can really get your hands around. Our job is to figure out how to make sure that you can trust that those big items are being handled responsibly, which they absolutely are. —Industry Professional Participant*

*I have to say, just restate really, these packages, aluminum cans, bottles, the corrugate boxes, the reason they're designed the way they are is because they are set up specifically for our recovery system. We want those back. Every one of our packages, we want back. That would be my biggest ask, is that you recognize that everyone at this table is focused on getting those packages back and making sure they don't go to landfills, they do create jobs. South Carolina has a fantastic program where two bottles equals a job for the state. They recognize the economic development opportunity and how it benefits the community and makes it a stronger and healthier community. Please recycle. Please recycle these items, and when I really don't know what to do with a package, I put it in the trash. That's the best opportunity because you've heard from the recyclers that 20% to 30% contamination means less value. Having the process in which what is trash and what is a good commodity that can be part of our circular economy [is important]. We don't have to keep mining for these materials. They are already a part of our system. —Industry Professional Participant*

*Stick with the classics: metal, plastic, aluminum cans, steel cans, and glass. And that's pretty much the basics. When in doubt, throw it out. We see a lot of wishful recycling going on and I*



*hear we have complicated it for you, and we're trying to simplify that. I hear that. I receive that. When in doubt, throw it out. That is my message here. —Industry Professional Participant*

*Please just do it, because it does matter. We need the material. If you're in doubt, throw it out, and if it's something you're going to have all of the time and if you don't know, your government should have it at their dot-gov or dot-org or whatever website. It's pretty easy to find. If it's something you're just using one time, and you don't know, don't worry about it. It's not the end at that point. If your access is not what you would like it to be, it's a lot easier to get rid of your waste than to get rid of your recycling. Just think—whoever it is, whether it's a department, or a municipality, or park, tell them that it's not okay. —Industry Professional Participant*

*I represent the recycled paper industry and our guys make your cereal boxes, and almost all of your cereal boxes are made of 100% recycled paper. My message would be, 'Buy recycled.' Look at the containers and if—as for if Dr Pepper is not putting their product into a recycled content bottle, they probably are, they just aren't putting it on the package, so write to them or email them. Sorry. I've been doing this a long time. Tell them, 'Why aren't you doing that?' Make the effort when you go into the stationary store. You see the information on the coffee paper, and we all buy it. Buy the 30% or 35% recycled content. That gives the message to the industry that we're interested. —Industry Professional Participant*

## **Marketing Input from Brand Representatives**

### **Findings**

Brand representatives were asked what they thought the recycling industry could learn from their marketing campaigns that might increase participation in recycling.

Comments suggested that, in general, there is simply not enough marketing specific to recycling. Further, brand representatives felt that marketing that focuses on the positive impacts of recycling could lead to increased recycling participation from consumers.

Brand representatives in the group suggested that successful marketing campaigns entail setting goals and explaining how to fulfill them—it was further suggested that the recycling industry could benefit from a similar approach.

### **Comments about effective marketing by brand representatives:**

*I think it's tricky because we don't see a lot of marketing for recyclers, but I would challenge ourselves as we market, a large part of our mission is to inspire happiness. And I think we need to inspire recycling. We need to show what the positive benefits are. I see that as the key misinterpretation of what is going on in this industry. Once we're aware of it, we need justification. If we're not justifying why we're out there asking consumers to put this in a different bin, we're not doing our job. That's an action item for us and if we recognize that, that will be a part of our campaigns next year. —Brand Representative Participant*

*As I mentioned before, Keurig Dr Pepper is very committed to its goal of making 100% of its K-cup coffee pods recyclable by the end of 2020, and they've started already in Canada. All of Canada will be converted to recyclable K-cups by 2018. We want to make sure we are doing this the right way, so we have been partnering with recycling facilities across the U.S. and Canada to ensure a couple of things: to ensure that the cups are not just recyclable, but they are getting*

*recycled when they get to that facility, they're actually getting captured and moved into the right screen. So, we tried to understand a couple of different things. We tried to understand what the consumer has to do with the pod after they use it to ensure that it is definitely captured. We learned from working with some, that they have to peel the lid off and dump the coffee before recycling the cup and that really ensures that it is getting captured and will not be considered a contaminant. That is important in terms of our education to the consumer, that that's the behavior change that will have to happen. But then you also try to understand, what is the rate at which these cups are actually getting captured. So, we did a couple of tests at facilities across the U.S. and Canada, and we tagged the pods to watch how they go through the recycling stream and found that they can be captured, which was really great news. Lastly, we tried to understand how many of these pods are being recycled the right way, and we did a case study where we audited a place in Canada and found that 70% of the pods are being recycled. That means it's been handled correctly, the lid has been ripped off, the coffee has been poured out, and it's been recycled correctly. We did all of this to ensure that what we are saying and what these places are saying is the same message and a consistent message on our packaging, on their websites, and it's all one consistent message. A partnership is so essential to education and marketing communication.*

—Brand Representative Participant

## Changing Behaviors

### Findings

The final portion of the discussion was devoted to remaining comments on how the industry may better encourage consumers to recycle.

Many consumer participants agreed that packaging needs to be properly labeled with recycling instructions. Additionally, several participants indicated that, because labels are often the primary source of information on the recyclability of a certain product, brands should focus on offering as much information on labels as possible.

At least one participant felt that the figures sometimes cited by industry professionals are beyond the average consumer's reasonable comprehension (e.g., when references are made to "millions of tons" of recycling material being converted each year). This participant suggested that the industry should make such references more "approachable," conceivable, and attainable (when appropriate). As an example, the participant recommended describing the difference one individual can make when recycling.

### Comments about how to change recycling behaviors:

*I think the ink on a package is critical. We always put some sort of message out. For instance, with Smartwater, it's on the inside that it's recycled. On the outside the message changes by brand, because we all have personal messages, so to speak. But I think we also need to do more of the advertisements online and yeah, just capture them in the store and make sure people are making purposeful decisions and they're making the right decisions. I think we can really think more socially, because that is a key way for us to engage with consumers, and what we've seen in a lot of the industry is from that influence that's happening, and I think we'll be looking for this as we go into 2019.* —Brand Representative Participant

*And piggybacking off of that, we found the same thing to be true, that the package is actually the primary source where a consumer learns whether or not to recycle something. They are probably not going online and so it's so essential to communicate clearly on our packaging, what is recyclable and how to recycle it, and that's what we are going to be doing as we transition.*

—Brand Representative Participant

*I wanted to add something real quick to the labeling question. I think increasingly there is a label on the outside which does give direct-to-consumer feedback as to whether something is recyclable, whether something is not recyclable, or whether something has to be done to empty it out. That is becoming standardized and it's on more and more packaging, and we're hoping to see it on more packaging.*

—Brand Representative Participant

*I just want to chime in here, and I want to offer one thing from this side of the table. In your communication, I think I heard 5 million tons, and that's a very impressive number, but if you would have said 10 million tons or 20 million tons, the number is so big it doesn't mean anything to me, as a consumer. If you were to say 100 pounds or 1,000 pounds per person, I think that would mean something. When you break it down, it means something. I would recommend staying away from those huge numbers across the country and breaking it down to a per person in your state.*

—Consumer Participant

*None of you have ever heard of [business name] plastics before, nor should you, but every single day, likely, you are encountering our plastics, and not through something we necessarily manufactured for our customers, but I heard today that you want to know where it's going and you want to assess value, and this is the kind of thing that is coming back into your home, so I think that's important to tell you that.*

—Industry Professional Participant

*I think this is more of a question than a comment, but I am just curious to know, as a consumer, is it cheaper for the manufacturers to use a recyclable product or an unrecyclable product, as far as how are these costs being passed to the consumer? I think, for everyday consumer products, such as paper, whether this or that is recycled or not, I am making a decision based on price, whereas, something more important like a cellphone, I might be willing to pay more for.*

—Consumer Participant

*So, recycling has probably not impacted the cost, but utilizing the recycled materials by putting them back in can [increase the price]. Sometimes it can be cheaper, or especially with glass, you use more recycled content just in the act of producing it, so I think that sometimes finding clear material to put back into our bottles can be more expensive. As you mentioned, the commodities that you mentioned, we think about regularly. We are tied with the markets and it is still one of our commitments to hit 50% recycled content for our bottles. Sometimes that will be painful, because it will be more costly, but our hope is that if people recycle more and we really drop that contamination, it won't be so costly. Then it becomes a more economical issue, when prices go up and down, so it is a give and take. Sometimes it's better and sometimes worse.*

—Brand Representative Participant

## APPENDIX: FOCUS GROUP DISCUSSION GUIDE

### I. INTRODUCTION (10:15 am – 10:25 am)

#### A. Welcome and purpose of the focus group

1. First, thank you for being here. This focus group is being conducted for Keep America Beautiful to better understand consumer attitudes toward recycling. The group today includes both recycling and non-recycling consumers, as well as representatives from the recycling industry and several major brands.
2. We [Andrea and Tom] work for Responsive Management, which is an independent research firm based in Virginia; we've been hired by Keep America Beautiful to conduct this opinion research.
3. You are here purely for research purposes—we are interested in your opinions, so there are no wrong answers. We purposely selected both recyclers and non-recyclers to be part of the discussion, and we are interested in hearing everyone's perspective.
4. Nothing you say will ever be associated with your name—we are recording the discussion but you will always remain anonymous in terms of the research results.
5. Our initial questions will be for consumers, and then we'll have some questions for the brand and recycling representatives.
6. This event is also being streamed on Facebook Live, and toward the end of the group we may have some questions to ask that have been submitted by viewers.

#### B. Rules

1. Please speak one at a time.
2. Be respectful of others' opinions, even if you disagree.
3. Please do not interrupt; everyone will have a chance to speak.
4. Please be honest! Again, we are interested in your opinions and reasons, so know that everything you say will be helpful to the research.
5. If I interrupt you to move the discussion on, it's simply a matter of time and getting through all the questions we have.

#### C. Introductions by moderator

1. *[We will have name cards prepared for each participant; during the introductions we will go around the table and introduce consumers by first name and recycling classification (die-hard, wishful, or non-recycler), as well as the first names of recycling and brand participants and their company affiliations—note that we may ask participants in the latter groups to share their specific job titles / responsibilities]*

## II. CONSUMER QUESTIONS (10:25 am – 11:05 am)

*[We are interested in hearing mostly from consumers in this section—industry representatives will be instructed to wait until later in the group to respond and ask follow-up questions.]*

- A. How often do you currently recycle?
  - 1. Do you recycle both at home and at work, or one place or the other? Why?
- B. What types of things do you recycle?
- C. Why do you or don't you recycle? What affects your decision of whether to recycle?  
*[OPEN-ENDED AT FIRST; THEN PROBE ON POTENTIAL REASONS]:*
  - 1. Concern about the environment and/or sustainability?
  - 2. The increasing volume of debris in the oceans?
  - 3. Climate change?
  - 4. Social pressure?
- D. Have you always recycled or not recycled? Did your recycling behavior change at some point?
  - 1. If so, how? Why?
- E. Are you influenced to recycle or not recycle by anyone?
  - 1. If so, by whom? How?
- F. Describe the recycling program where you live: do you have curbside pickup or are you required to drop your items off somewhere if you want to recycle?
- G. How could your recycling program be improved? What changes would you like to see?
- H. What happens to your recyclables after they're picked up or you drop them off?
- I. Have you ever looked for information on recycling in your area?
- J. When was the last time you received guidance on what can be recycled in your area?
- K. What could the recycling industry do to make you more likely to recycle?  
*[OPEN-ENDED AT FIRST; THEN PROBE ON POTENTIAL WAYS]:*
  - 1. More information on what to recycle?
  - 2. Better or clearer information on what to recycle?
  - 3. Better or larger bins?
  - 4. More convenient collection?

**III. RECYCLING INDUSTRY QUESTIONS (11:05 am – 11:20 am)**

*[Consumers will be encouraged to respond to the comments from recycling industry representatives in this section, as time permits; industry representatives will also be able to address points raised by consumers earlier in the discussion.]*

- A. Why is it important that people recycle?
- B. What do consumers need to know about recycling to get them to recycle more often?
- C. What would you like to see people do differently when it comes to recycling?
- D. What are the most common recycling mistakes people make? For example, are there things people attempt to recycle that they should instead be putting in the trash?

**IV. BRAND REPRESENTATIVE QUESTIONS (11:20 am – 11:35 am)**

*[Again, time permitting, we will encourage consumers to respond to what they hear from brand representatives.]*

- A. What can the recycling industry learn from your marketing tactics about how to influence consumer recycling behavior?
- B. How should the industry be reaching people to change their recycling behavior?
- C. How are you positioning your brand to align with recycling and the recyclability of your products?
- D. How does your company communicate the recyclability of your products?
- E. What are your recycling expectations for consumers?

**V. FACEBOOK LIVE QUESTIONS (11:35 am – 11:45 am)**

*[One of Responsive Management's moderators will keep an eye on questions submitted through Facebook Live during the group. We plan to allow about 10 minutes for this final portion of the discussion, although this will depend on the questions received. We may also ask questions from Facebook Live earlier in the discussion if they are relevant to the topic.]*

**VI. CLOSING**

- A. Thank you for coming today and talking about these issues.
- B. Does anyone have any additional comments?

## ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized survey research firm specializing in attitudes toward natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies, businesses, and organizations better understand and work with their constituents, customers, and the public.

Since 1985, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of research measuring public opinions and attitudes. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 projects and almost \$60 million in research.

Responsive Management has conducted research for every state fish and wildlife agency and most of the federal resource agencies, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, the Bureau of Land Management, the U.S. Coast Guard, and the National Marine Fisheries Service.

We have also provided research for many nonprofit and nongovernmental organizations, including the National Wildlife Federation, the National Shooting Sports Foundation, the National Rifle Association, the Archery Trade Association, the Izaak Walton League, the Rocky Mountain Elk Foundation, Ducks Unlimited, SCI, and Dallas Safari Club. Other nonprofit and NGO clients include Trout Unlimited, the Sierra Club, the American Museum of Natural History, the Ocean Conservancy, the National Association of State Boating Law Administrators, and the BoatUS Foundation.

Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others.

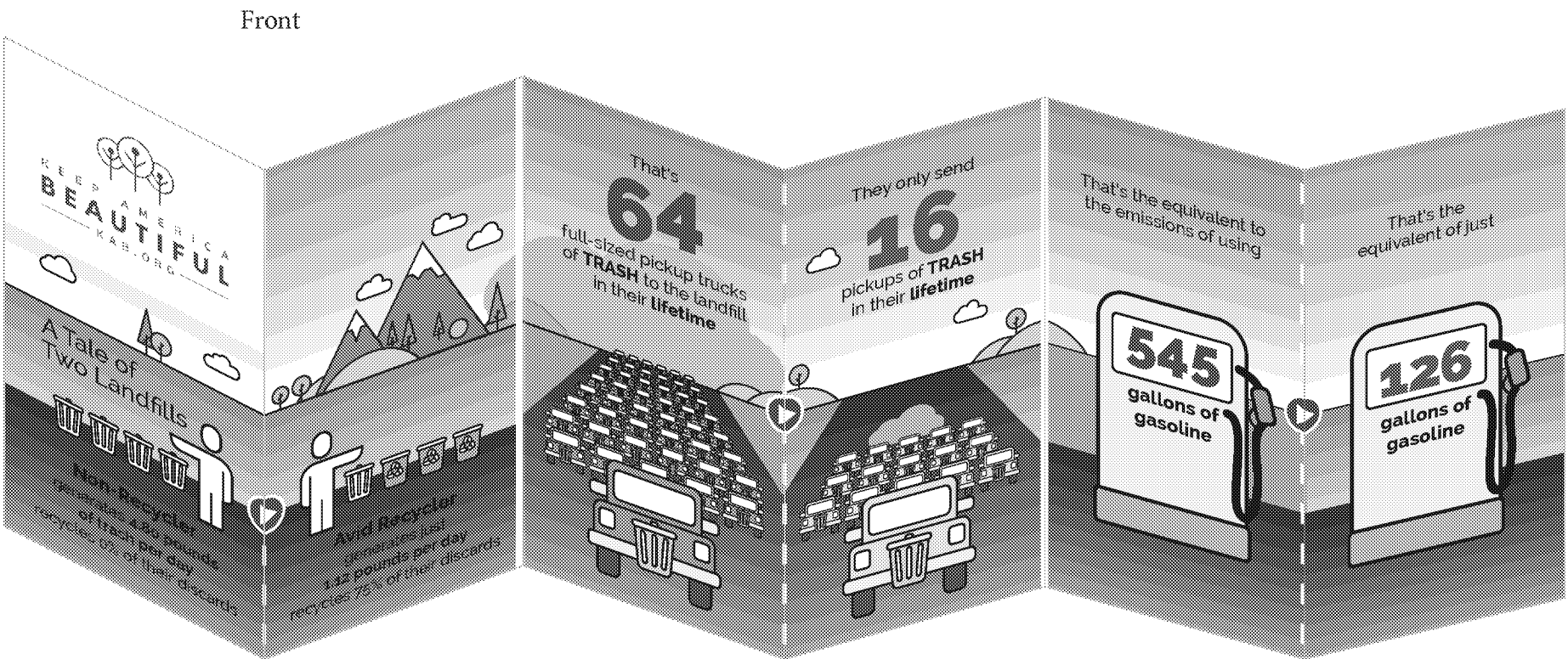
Responsive Management also provides data collection for the nation's top universities, including Auburn University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, and many more.

Our research has been upheld in U.S. Courts, used in peer-reviewed journals, and presented at major wildlife and natural resource conferences around the world. Responsive Management's research has also been featured in many of the nation's top media, including *Newsweek*, *The Wall Street Journal*, *The New York Times*, CNN, and on the front pages of *The Washington Post* and *USA Today*.

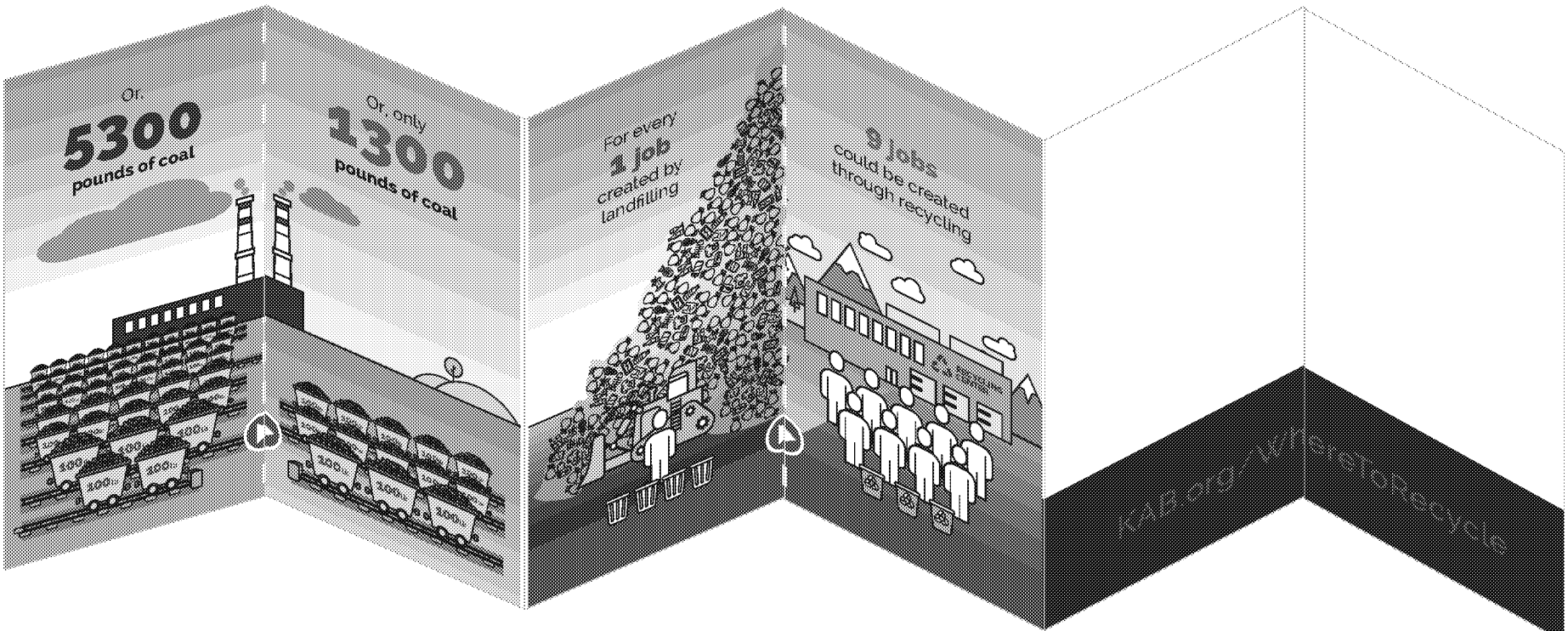
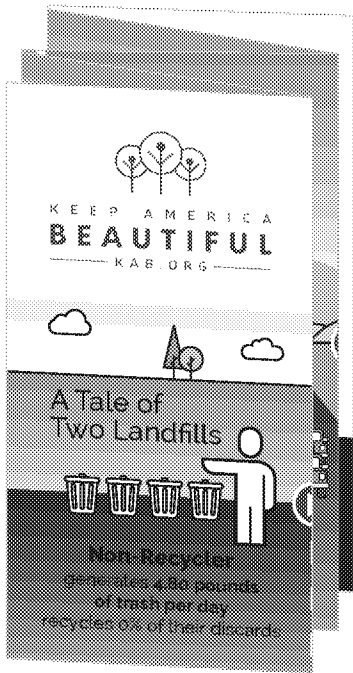
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- 1. Select "Tabloid" 11"x17" paper
- 2. Print page 4 on the back of page 3
- 3. Image will flip on the short edge so both sides' tops are the same.
- 4. Line a straight edge to every top and bottom dotted score line and use pen cap or similar blunt object to run the length of the ruler to create a score.
- 5. Line a straight edge to every outside vertical and horizontal solid cut line and use x-acto blade or similar razor cutting tool to cut the exterior shape. BE SURE TO NOT TO CUT PAST THE EDGE OF THE OF THE FULL SHEET OR YOU WILL LOSE A CROP MARK FOR YOUR NEXT CUT. Fold as shown.

FOLD AS SHOWN



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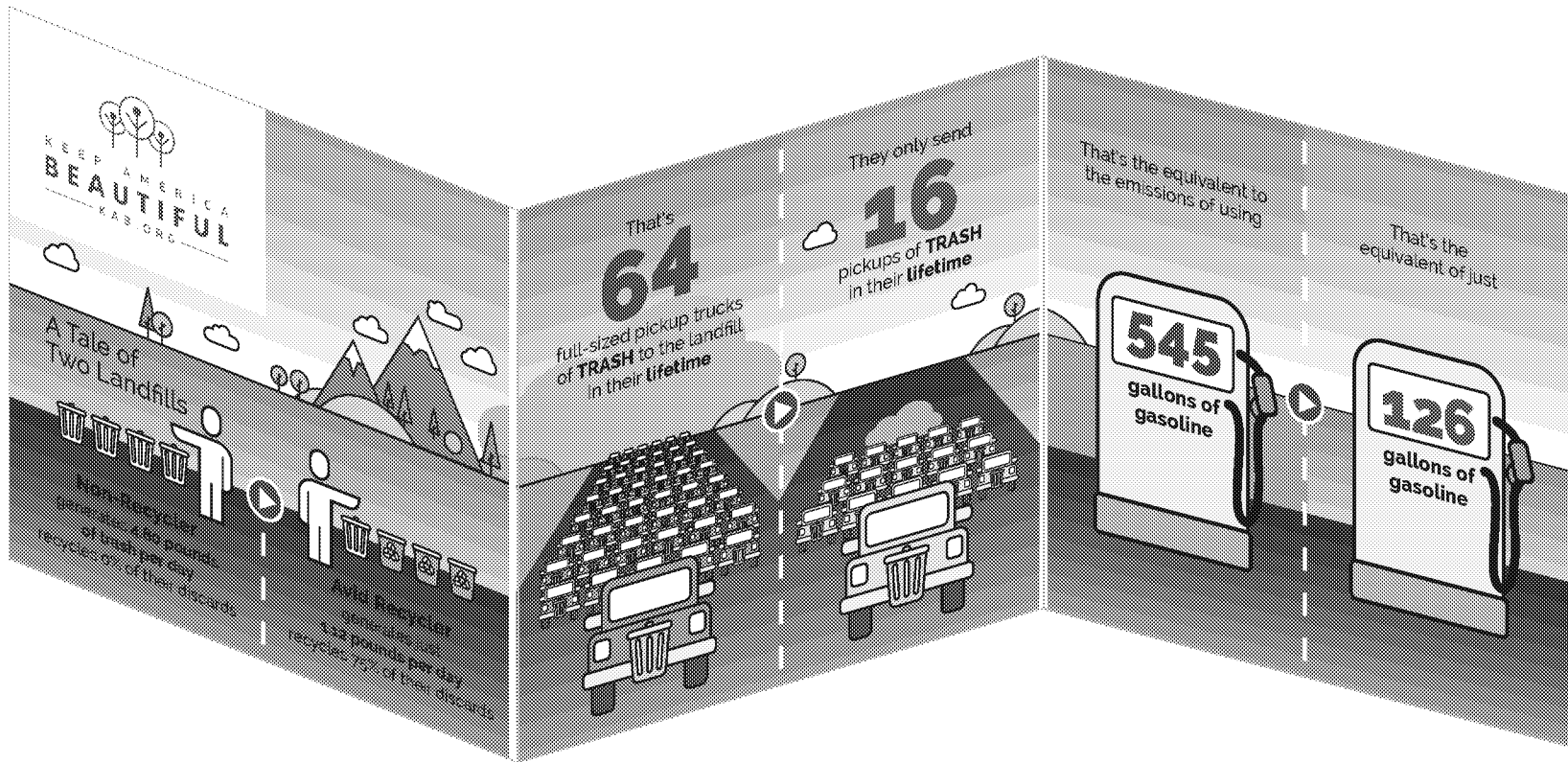




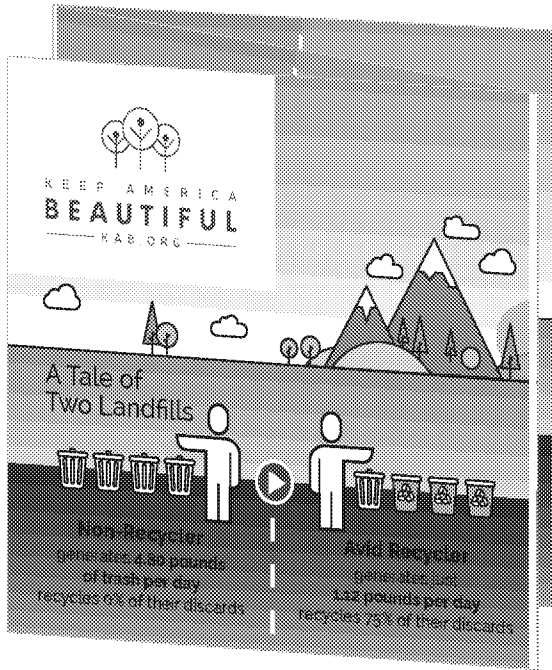
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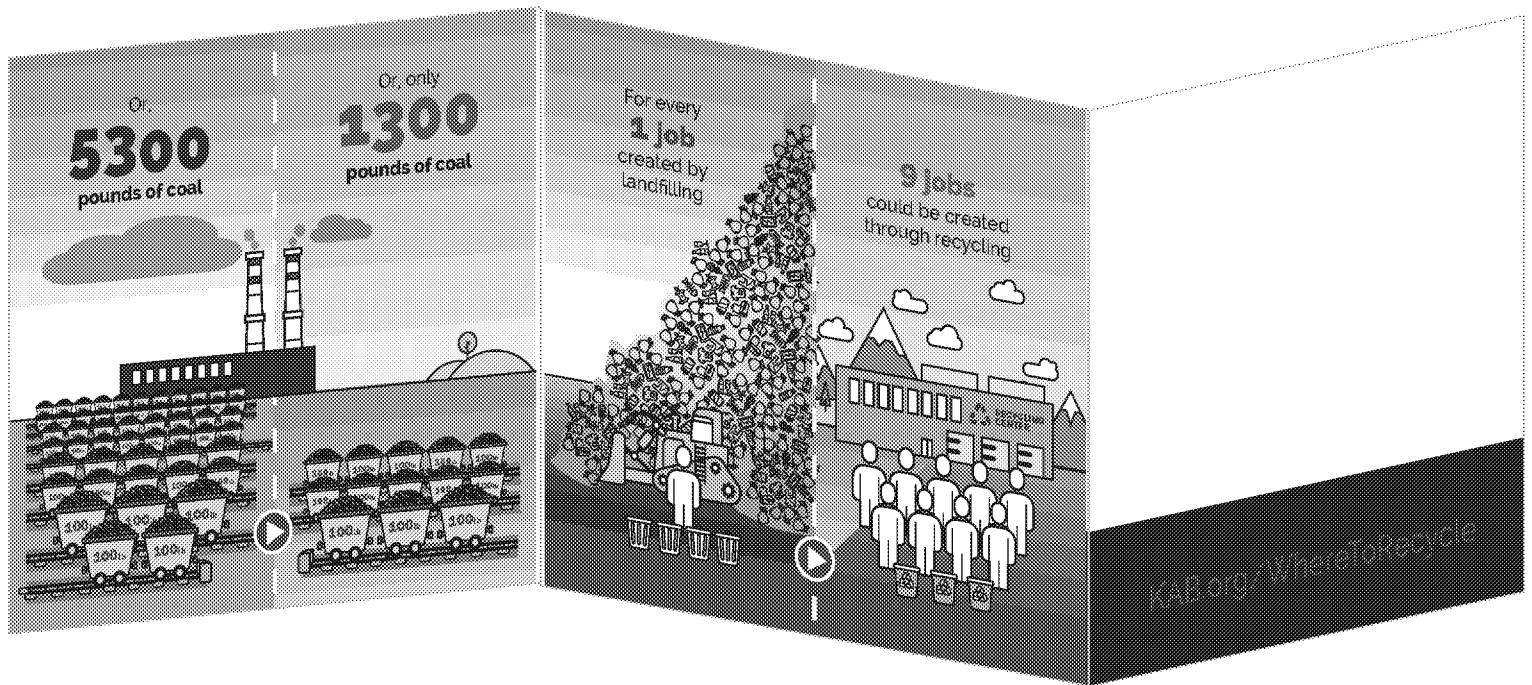
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Back





### A Tale of Two Landfills

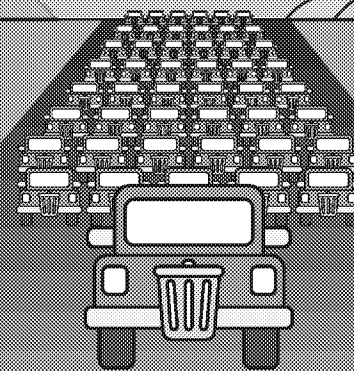


**Non-Recycler**  
generates 4.80 pounds  
of trash per day  
recycles 0% of their discards



**Avid Recycler**  
generates just  
1.12 pounds per day  
recycles 75% of their discards

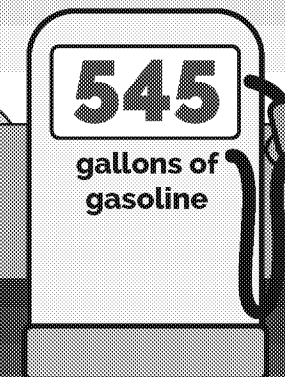
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**64**  
full-sized pickup trucks  
of **TRASH** to the landfill  
in their **lifetime**



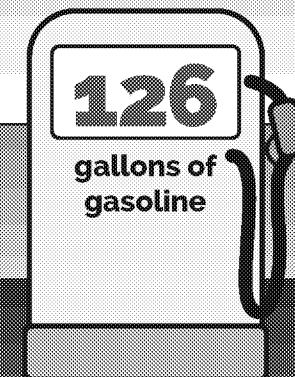
They only send  
**16**  
pickups of **TRASH**  
in their **lifetime**

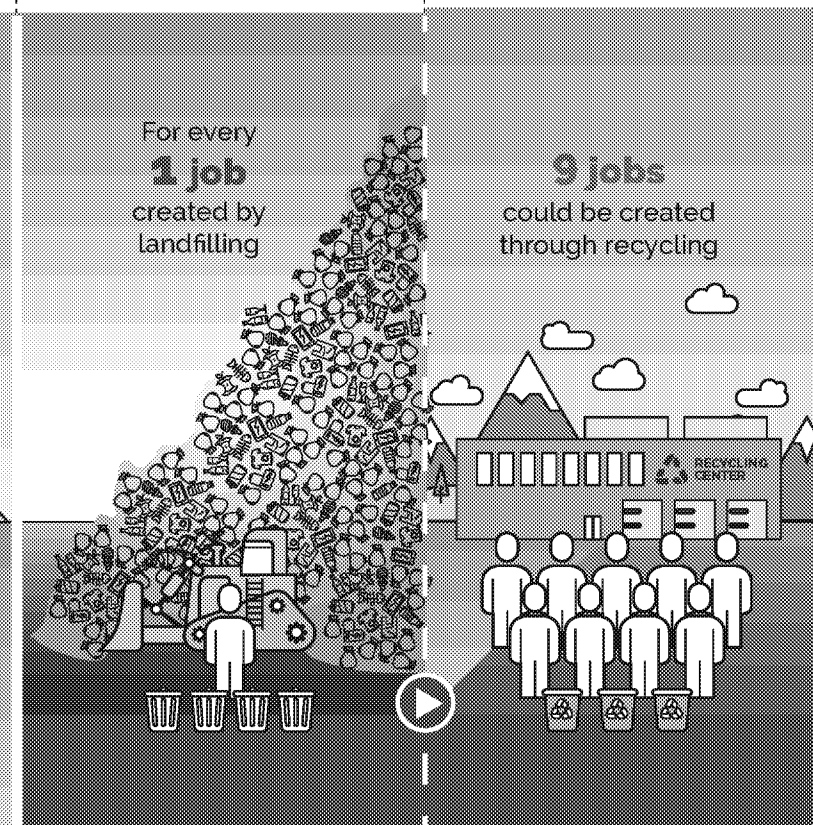
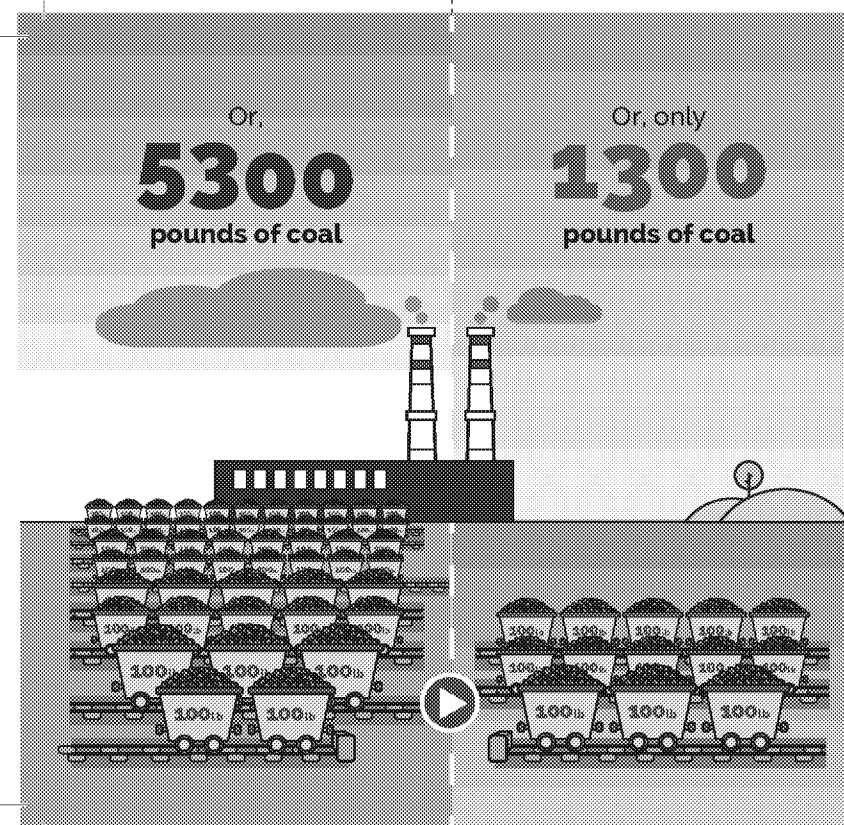


That's the equivalent to  
the emissions of using



That's the  
equivalent of just





[KAB.org/WhereToRecycle](http://KAB.org/WhereToRecycle)

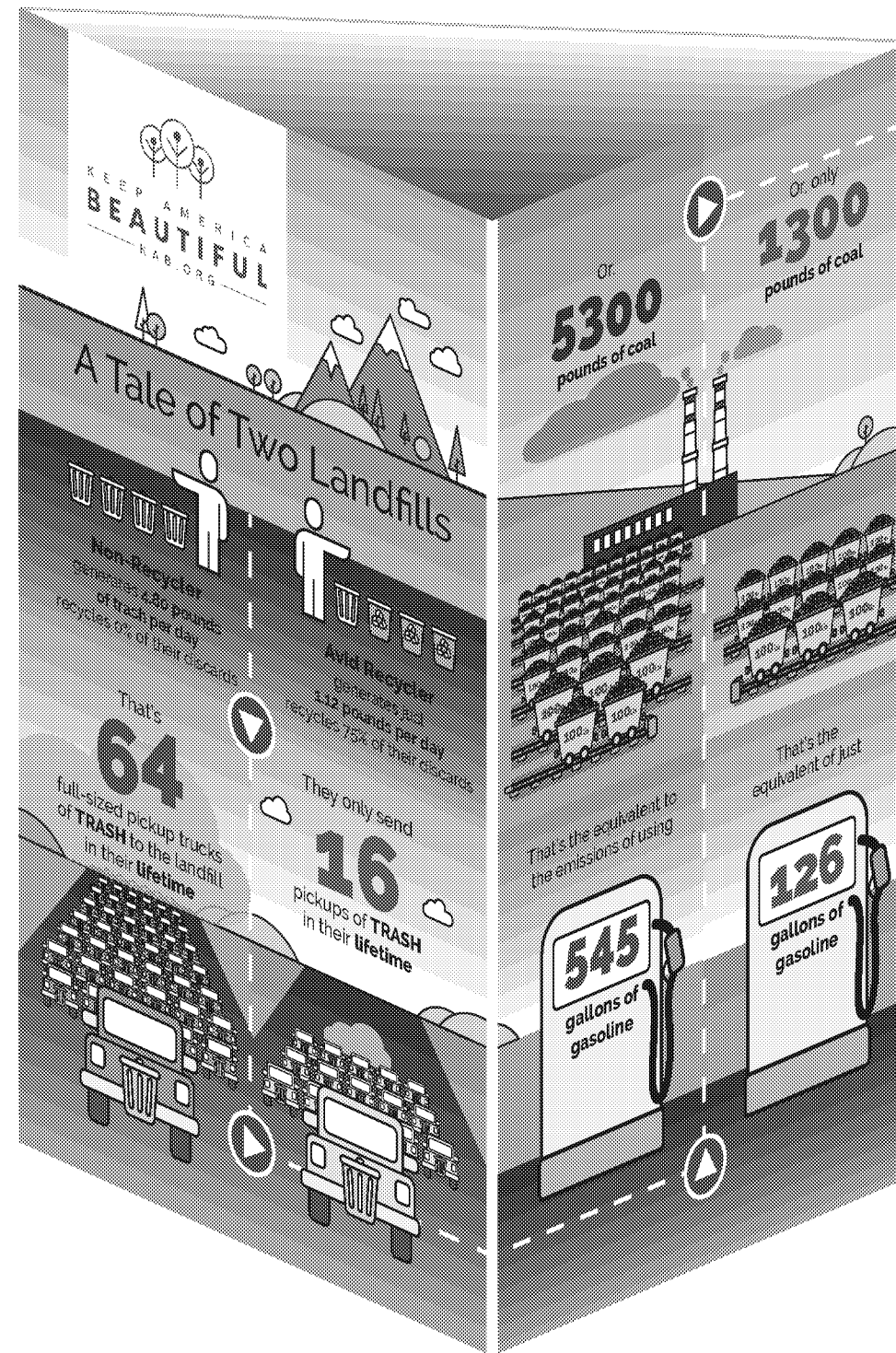
1. Select "Tabloid" 11"x17" paper and print page 2

2. Line a straight edge to the top and bottom dotted score lines nearest to the solid white lines as well as the last vertical dotted line and use pen cap or similar blunt object to run the length of the ruler to create a score.

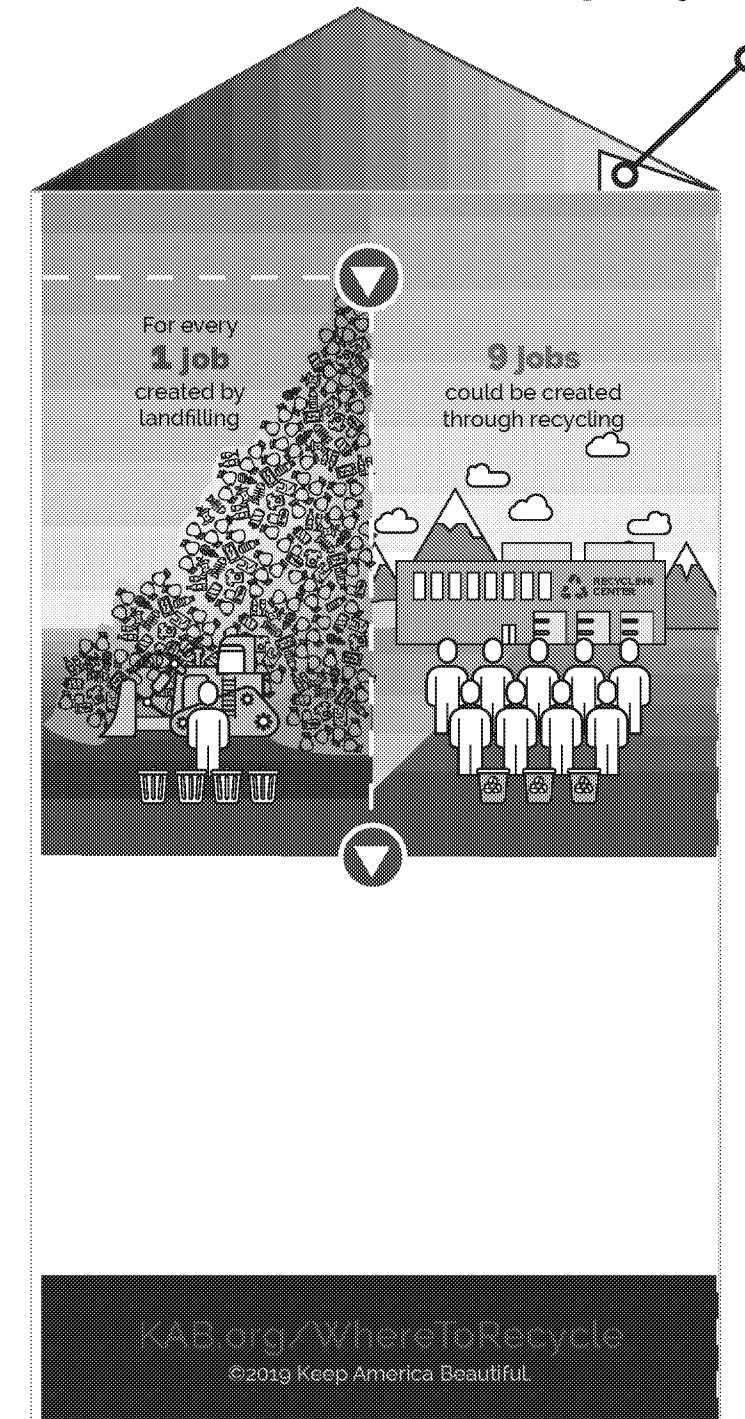
3. Line a straight edge to every outside vertical and horizontal solid cut line and use x-acto blade or similar razor cutting tool to cut the exterior shape. BE SURE TO NOT TO CUT PAST THE EDGE OF THE OF THE FULL SHEET OR YOU WILL LOSE A CROP MARK FOR YOUR NEXT CUT. Fold as shown.

4. Trim shortest flap panel to the dotted angles. Fold as shown. Tape along smaller flap's total length to the back of the front panel.

FOLD AS SHOWN



Tape along the inside of the flap





## A Tale of Two Landfills

**Non-Recycler**  
generates 4.80 pounds  
of trash per day  
recycles 0% of their discards

**Avid Recycler**  
generates just  
1.12 pounds per day  
recycles 75% of their discards

That's  
**64**  
full-sized pickup trucks  
of **TRASH** to the landfill  
in their **lifetime**

They only send  
**16**  
pickups of **TRASH**  
in their **lifetime**

Or,  
**5300**  
pounds of coal

Or, only  
**1300**  
pounds of coal

That's the equivalent to  
the emissions of using

**545**  
gallons of  
gasoline

That's the  
equivalent of just

**126**  
gallons of  
gasoline

For every  
**1 job**  
created by  
landfilling

**9 jobs**  
could be created  
through recycling

[KAB.org/WhereToRecycle](http://KAB.org/WhereToRecycle)  
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